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(54) Polycrystalline diamond cutting element with diamond ridge pattern

(57) This invention relates to a novel domed polycrystalline diamond cutting element wherein a hemispherical diamond layer is bonded to a tungsten carbide substrate, commonly referred to as a tungsten carbide

stud. Broadly, a pattern of ridges or bumps is integrally formed in the abrasive layer which ridges are designed to cause high localized stresses in the rock, thus starting a crack. By initiating cracks in localized areas, the crushing action could be performed with less force.

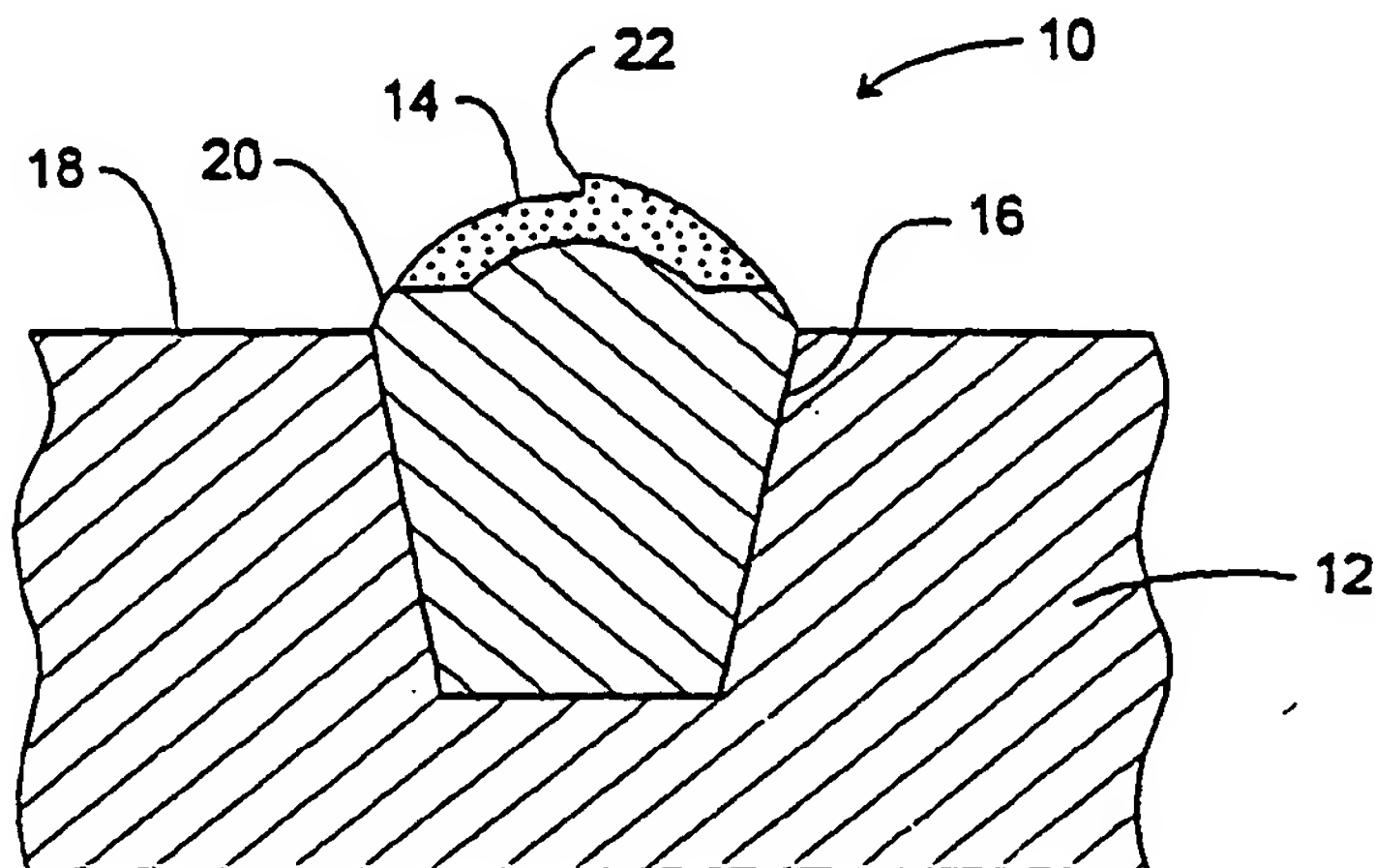


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 97 31 0503

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Place of search THE HAGUE		Date of completion of the search 29 July 1999	Examiner Schouten, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document</p>			

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